

**AMENDMENTS TO THE CLAIMS**

This listing will replace all prior versions, and listings, of claims in the application:

**5 Listing of Claims:**

163. (currently amended) A device adapted to be used in a system for the assessment of at least one parameter of particles in a liquid analyte material,  
10 the a device comprising

- a sample compartment comprising an exposing domain, said exposing domain allowing electromagnetic signals from a sample in the exposing domain to pass to a detection device and to form, in the detection device, a spatial image representation of the exposing domain processable by processing means of the detection device,
- an inlet through which a volume of a liquid sample representing the analyte material can been introduced,
- a flow system comprising at least a channel allowing at least a portion of the volume of the liquid sample to flow within the device,
- and means for arranging the device in relation to the detection device, ~~, which detection device comprises detection means for quantitatively detecting spatial image data and processing means for processing the detected image presentation in a manner allowing electromagnetic signals from a sample in the exposing domain of the device to pass~~

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to the detection device and to form, in the detection device, a spatial image representation of the exposing domain processable by the processing means of the detection device and means for disengaging the device from the detection device after the detection by the detection means,  
5 - the device having no sample outlet.

164. (currently amended) A device according to claim 10 163, wherein the flow system additionally comprises a compartment or a flow channel part in which or from which at least part of one or more reaction components initially loaded in the compartment or flow channel part is added to at least a portion of the volume of 15 the liquid sample representing the analyte material.

165. A device according to claim 164, wherein at least one of the reaction components is in freeze-dried form.

20 166. (currently amended) A device according to claim 163, wherein ~~the~~ part of the ~~flow~~ channel provides substantial laminar flow ~~therethrough and/or comprises~~ one or more mixing chambers in the liquid sample.

25 167. (currently amended) A device according to claim 163, wherein ~~the~~ part of the ~~flow~~ channel has at least one bend or obstruction resulting in ~~substantially~~ turbulent flow in liquid passing the bend or 30 obstruction.

168. (currently amended) A device according to claim  
163, wherein the flow system comprises one or more  
means for regulating the velocity of the flow into,  
within, or out of the device, the velocity regulating  
means comprising means selected from the group  
5 consisting of: stop valves, one way valves, and  
pressure valves and/or speed reduction valves.

169. (currently amended) A device according to claim  
10 163, ~~which~~ wherein the device comprises means for  
performing one or more operations on the liquid  
sample, the operations being selected from the group  
consisting of filtration, concentration and magnetic  
attraction.

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170. (currently amended) A device according to claim  
163, containing one or more compartment(s) or domain  
which allows ~~on~~-spectrophotometric measurement for the  
determination of any chemical property, the  
20 spectrophotometric measurement ~~e.g., one or several~~  
~~eff,~~ being selected from the group consisting of: mid-  
infrared attenuation, near-infrared attenuation,  
visible attenuation, ultra-violet attenuation,  
photoluminescence, raman scatter, and nuclear magnetic  
25 resonance.

171. (currently amended) A device according to claim  
163, wherein the interior of the sample compartment  
has an average thickness depth of between 20  $\mu\text{m}$  and  
30 2000  $\mu\text{m}$ , ~~preferably between 20  $\mu\text{m}$  and 1000  $\mu\text{m}$ , more~~  
~~preferably between 20  $\mu\text{m}$  and 200  $\mu\text{m}$ .~~

172. (currently amended) A device according to claim 163, wherein sample compartment has dimensions, in a ~~direction substantially plane~~ parallel to an exposing window, in the range between 1 mm by 1 mm and 10 mm by 5 10 mm.

173. (currently amended) A device according to claim 163, wherein the volume of the sample compartment from which electromagnetic radiation is exposed, is in the 10 range between 0.01  $\mu$ l and 20  $\mu$ l, ~~more preferably in the range between 0.04  $\mu$ l and 4  $\mu$ l.~~

174. (new) A device according to claim 163, wherein the flow system comprises one or more mixing chambers. 15

175. (new) A device according to claim 163, wherein the interior of the sample compartment has an average depth of between 20  $\mu$ m and 1000  $\mu$ m.

20 176. (new) A device according to claim 163, wherein the interior of the sample compartment has an average depth of between 20  $\mu$ m and 200  $\mu$ m.

25 177. (new) A device according to claim 163, wherein the volume of the sample compartment from which electromagnetic radiation is exposed, is in the range between 0.04  $\mu$ l and 4  $\mu$ l.

30 178. (new) A device according to claim 163, wherein the device comprises a propelling means.

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